DOCUMENT RESUME

ED 233 894 SE 042 803

TITLE Summary Proceedings of the Congress of International Physicians for the Prevention of Nuclear War (1st, Airlie, Virginia, March 20-25, 1981).
INSTITUTION International Physicians for the Prevention of Nuclear War, Inc., Boston, MA.
PUB DATE 81
NOTE 13p.
AVAILABLE FROM International Physicians for the Prevention of Nuclear War, Inc., 225 Longwood Ave., Boston, MA 02115.
PUB TYPE Collected Works - Conference Proceedings (021)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Civil Defense; *Disarmament; International Relations; *Medical Services; *Nuclear Warfare; Physicians; Preventive Medicine; *Public Health; *Radiation Effects; World Problems
IDENTIFIERS *Physician Role

ABSTRACT

Physicians charged with the responsibility for the lives of their patients and the health of the community must begin to explore a new province of prevention medicine, the prevention of nuclear war. This conference was held to alert these physicians worldwide, of the mortal peril to public health which could result from nuclear war. The hope is that physicians who are aware of the dire consequences will help educate their communities about the effects of nuclear war, since only an aroused and informed citizenry can change the current course of events. Seventy-three physicians from 12 countries participated in the conference. Areas discussed include: predictable and unpredictable effects of nuclear war; role of physicians in the post-attack period; social, economic, and phychological costs of the nuclear arms race as related to health needs; and what physicians can do to prevent nuclear war. In addition, public appeals to prevent war are made to heads of all governments and to the United Nations, to Ronald Reagan (President of the United States), to Leonid Brezhnev (Chairman of the Presidium of the U.S.S.R. Supreme Soviet), and to physicians of the world. (JN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED233894

Summary Proceedings of the First Congress of International Physicians for the Prevention of Nuclear War

Airlie, Virginia
March 20-25, 1981

This document drafted during the last day of the congress, represents the combined efforts and conclusions of seventy three physicians from the following twelve countries:

Canada
France
Israel
Japan
the Netherlands
Norway
Sierra Leone
Sweden
the United Kingdom
the United States
the Soviet Union
West Germany

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Carolyn Berner
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

International Physicians for the Prevention of Nuclear War, Inc.

635 Huntington Avenue, 2nd floor
Boston, Massachusetts 02115
Telephone (617) 738-9404

SE042803

Dear Colleagues:

The multiplying stockpiles of nuclear weapons of ever increasing destructiveness threaten humankind with an unimaginable catastrophe. The peoples of North America, the Soviet Union and Europe are held hostage by the accelerating arms race. A war without winners endangers not only human survival but the fragile ecology of our planet.

Physicians charged with responsibility for the lives of their patients and the health of the community must begin to explore a new province of preventive medicine, the prevention of nuclear war.

We gathered here because we do not accept the inevitability of nuclear conflict. We met here because we reject the utilization of technology for nuclear weapons rather than for improving the quality of life. We met here because we do not believe that differences between political systems can be resolved by the use of nuclear weapons. We met here because of our abiding faith in the concept that what humanity creates, humanity can control.

Our aim is to alert physicians world-wide of the mortal peril to the public health. Our hope is that physicians will help educate their communities, for only an aroused and informed citizenry can change the course of events.

Bernard Lown, M.D.
President
International Physicians for the
Prevention of Nuclear War

Airlie, Virginia
March, 1981

Preamble

Nuclear war would be the ultimate human and environmental disaster.

The immediate and long-term destruction of human life and health would be on an unprecedented scale, threatening the very survival of civilization.

The threat of its occurrence is at a dangerous level and is steadily increasing.

Even in the absence of nuclear war, invaluable and limited resources are being diverted unproductively to the nuclear arms race, leaving essential human, social, medical, and economic needs unmet.

For these reasons, physicians in all countries must work toward the prevention of nuclear war and for the elimination of all nuclear weapons.

Physicians can play a particularly effective role because they

1. are dedicated to the prevention of illness, care of the sick and protection of human life;
2. have special knowledge of the problems of medical response in nuclear war;
3. can work together with their colleagues without regard to national boundaries;
4. are educators who have the opportunity to inform themselves, their colleagues in the health professions, and the general public.

The following statements were developed by working groups at the First Congress of International Physicians for the Prevention of Nuclear War, meeting at Airlie, Virginia, March 20-24, 1981.

Predictable and Unpredictable Effects of Nuclear War

The consequences of the nuclear attack on Hiroshima and Nagasaki were disastrous. Yet even they do not serve as adequate precedents for the amount of death and destruction that would follow nuclear warfare today. Given any scenario of a massive nuclear strike in present conditions, the fate of the inhabitants of those two cities would be shared by tens to hundreds of millions of people. Even a single one-megaton nuclear bomb explosion (80 times more powerful than that dropped on Hiroshima) over an urban area would cause death and injury to people on a scale unprecedented in the history of mankind and would present any remaining medical services with insoluble problems. In the event of a major nuclear war there would be thousands of such explosions.

We must distinguish between the immediate and the delayed effects of nuclear war. Among the immediate effects are mass deaths in the first hours, days, and weeks after an explosion. These are caused by the simultaneous effects of blast, heat and large doses of penetrating radiation. The number of such deaths would be magnified catastrophically by the destruction of buildings, by secondary fires, by disruption of all life-support systems including electric power, communication and transportation, and by the destruction and contamination of the water supply and of foodstocks.

It is difficult for us, even as physicians, to describe adequately the human suffering that would ensue. Hundreds of thousands would suffer third-degree burns, multiple crushing injuries and fractures, hemorrhage, secondary infection, and combinations of all of these. When we contemplate disasters, we often assume that abundant medical resources and personnel will be available. But contemporary nuclear war would inevitably destroy hospitals and other medical facilities, kill and disable most medical personnel, and prevent surviving physicians from coming to the aid of the injured because of widespread radiation dangers. The hundreds of thousands of burned and otherwise wounded people would not have any medical care as we now conceive of it: no morphine for pain, no intravenous fluids, no emergency surgery, no antibiotics, no dressings, no skilled nursing, and little or no food or water. The survivors would envy the dead.

It is known from the Japanese experience that in the immediate aftermath of an explosion, and for many months thereafter, the survivors suffer not only from their physical injuries—radiation sickness, burns, and other trauma—but also from profound psychological shock caused by their exposure to such overwhelming destruction and mass death.

The problem is social as well as individual. The social fabric upon which human existence depends would be irreparably damaged.

Those who did not perish during the initial attack would face serious—even lifelong—dangers. Many exposed persons would be at increased risk, throughout the remainder of their lives, of leukemia and a variety of malignant tumors. The risk is emotional as well as physical. Tens of thousands would live with the fear of developing cancer or of transmitting genetic defects, for they would understand that nuclear weapons, unlike conventional weapons, have memories—long, radioactive memories. Children are known to be particularly susceptible to most of these effects. Exposure of fetuses would result in the birth of children with small head size, mental retardation, and impaired growth and development. Many exposed persons would develop radiation cataracts and chromosomal aberrations.

Delayed radioactive fallout from multiple nuclear detonations would render large areas of land uninhabitable for prolonged periods of time, making it impossible to produce the food upon which the survival of whole populations would depend. Aside from the severe effects in the areas most immediately affected by explosion or local fallout, there would occur effects from both ground and air bursts throughout the world. Fallout would increase the incidence of cancers and of genetic defects in nations and populations far from the targeted areas. These and other effects are difficult to quantify, but it is known that they would occur.

The use of nuclear weapons with an aggregate yield greatly exceeding that of all the explosions (including atomic explosions) in human history poses dangers to the entire planet, and to all of mankind. Among these are profound disruptions of the ecological balance—disturbances to all living organisms, crops, and the atmosphere, with consequences of a nature and magnitude we can only guess at. For example, the release into the atmosphere of large quantities of nitrogen, formed during multiple nuclear explosions, could disturb the ozone layer of the atmosphere, which protects the surface of the earth from the penetrating component of ultraviolet radiation; this would probably cause the death of vegetation and animals and injury to people. In the magnitude, duration, and variety of the dangers it poses to biological and social survival, nuclear war has no precedent in the experience of mankind. The survival of civilized life is at stake.

In one likely and specific scenario that we have considered—an all-out nuclear war between the United States and the Soviet Union in the mid-1980's—it is likely that

1. The population would be devastated.
   Over 200,000,000 men, women, and children would be killed immediately.
   Over 60,000,000 would be injured.
   Among the injured,
   —30,000,000 would experience radiation sickness,
   —20,000,000 would experience trauma and burns,
   —10,000,000 would experience trauma, burns, and radiation sickness.
2. Medical resources would be incapable of coping with those injured by blast, thermal energy, and radiation.
   —80% of physicians would die.
   —80% of hospital beds would be destroyed.
   —Stores of blood plasma, antibiotics and drugs would be destroyed or severely compromised.
   —Food and water would be extensively contaminated.
   —Transportation and communication facilities would be destroyed.
3. Civil defense would be unable to alter the death and devastation described above to any appreciable extent.
4. The disaster would have continuing consequences.
   —Food production would be profoundly altered.
   —Fallout would constitute a continuing problem.
   —Survivors with altered immunity, malnutrition, an unsanitary environment, and severe exposure problems would be subject to lethal enteric infections.
5. A striking increase in leukemia and other malignancies would be observed among long-term survivors. It would be most severe in those who were children at the time of exposure.
6. Profound changes would occur in weather caused by particulates and reduction of atmospheric ozone with attendant alterations in man, animal, and plant species.
7. The effect on adjacent countries is incalculable.

The Role of Physicians in the Post-Attack Period

Considering the known thermal, blast and radiation effects of a one megaton thermonuclear explosion over an industrial city of about four million persons, we know that from 200,000 to nearly 500,000 immediate deaths would result, with an additional 400,000 to over 600,000 injured, depending on the nature of the attack.

Instantaneous death would occur as a result of temperatures greater than in the sun itself and from immense blast effects. Physical structures would be converted into unrecognizable rubble and social organization would disintegrate. Many injured would die as a consequence of huge fires and intense radioactive fallout. Neither doctors nor the hospitals in which they work would be spared.

In addition to the dead, there would be the injured—some walking with clothes in shreds and skin peeling in sheets from burns, some trapped in buildings and basements. Many of these would die. Many who were rescued would not survive the crush injuries, multiple fractures or hemorrhages. Others would die in days or in weeks from burns, traumatic wounds or radiation exposure.

Many of those injured by a nuclear blast would have combinations of burns, extensive lacerations and sublethal doses of neutron and gamma radiation. Grave psychological trauma affecting both physician and patient would further aggravate the already severe problems of diagnosis and treatment. These many factors complicate the outcome of therapy and would critically affect medical decisions about who should receive care and who could only be allowed to die with such minimal supportive measures as might be available. Burn and radiation injuries, regardless of other complications, would place the greatest strain on medical personnel and facilities. From the British experience in wartime London, it is estimated that the acute treatment of only 34,000 serious burn cases would require 170,000 health professionals and 8,000 tons of supplies.

A city struck by a single one megaton bomb would find its electrical, water and food supplies totally disrupted. The techniques of modern medical care would be seriously compromised if not entirely halted. Much of the essential supply of blood, antibiotics and other materials would be destroyed. A target nation, however, might cope partially with the consequences of having one city struck by a single nuclear bomb. The surviving doctors and other health professionals could respond, supported by help from outside the stricken city, but with severe limitations. The response would fall much below acceptable medical standards.

In peacetime the medical care system can cope successfully with a very small number of the kind of casualties which can be expected in huge numbers from the explosion of a single nuclear bomb. Successful treatments of extensive burns, of crushing injuries, of fractures and lacerations, of perforating wounds of abdomen and thorax, and of sublethal to near-lethal doses of radiation all require the full availability of modern medical technology and the finely developed skills of medical and other support personnel. The medical capacity of any nation would be severely strained, if not for a period overwhelmed, by dealing with the victims of even a single nuclear bomb.

Nuclear war, however, is very likely to involve more than the appalling destruction from a single nuclear bomb, or even a few bombs. With more than 50,000 nuclear weapons in existing stockpiles we must face the prospect of the explosion of hundreds and perhaps thousands of bombs, many possessing hundreds of times the explosive power of those that destroyed Hiroshima and Nagasaki. As tens or hundreds of cities are simultaneously attacked, death and casualties escalate geometrically. The fabric of society would disintegrate and the medical care system, deprived of the facilities developed over the years, would revert to the level of earlier centuries. The surviving walking wounded, physician and layman alike, could only provide what mutual comfort the remnants of their individual humanity would permit. The earth would be seared; the skies would be heavy with lethal concentrations of radioactive particles; and no response to medical needs could be expected from medicine.

The Social, Economic, and Psychological Costs of the Nuclear Arms Race as Related to Health Needs

Preface

The health of mankind is inseparably connected with social, economic, and psychological strengths. The greatest risk of the arms race to health is that it increases the likelihood of nuclear war. Even without such a war, precious human, social, medical, and economic resources are presently diverted unproductively to the nuclear arms race, and this diversion adversely affects health.

Social Costs

Any social undertaking of the magnitude of the arms buildup is bound to affect social structure and social values, regardless of the basis on which that society is built. In particular, activities develop which generate further pressure for more arms and thus establish a dangerous cycle. Moreover, as the scale of arms escalation increases relative to the size of the social institutions and to the strengths of social values, the latter become subverted to, and begin to reflect, the same unproductive and impoverishing priorities and values inherent in the buildup of arms.

Economic Costs

Consideration of economic issues ranges beyond the special expertise of physicians. However, we believe that these issues cannot be completely ignored. The diversion of a major portion of the world's economic resources to armaments increases the likelihood of a nuclear war that would result in death and disability for much of the world's population. This is the ultimate health cost of the arms race and would devastate economic and social organization. The arms buildup weakens the application of existing knowledge, technology, and resources to the prevention and treatment of health problems that currently affect large numbers of the world's population. The arms race increasingly burdens much of the world's population who live in less developed countries. These countries can least afford to use their scarce resources for arms and will suffer grave health and social consequences in doing so. Of greatest importance is that the use of economic resources for armaments diminishes development of knowledge, technology, and manpower that could address global ecological and overpopulation problems. The strains these problems place on the world's limited resources will result, if not resolved, in dire health consequences and, in themselves, increase the likelihood of a nuclear war.

Psychological Costs and Effects

As physicians we can speak about human psychological responses with confidence based on our professional knowledge and experience. Nuclear arms have created a new reality for humanity with profound and widespread psychological effects. The consequences of the use of nuclear weapons defy human comprehension because of the the enormity of their destructiveness. This danger grows steadily more acute as nuclear weapons production continues. Studies indicate among other effects, that living in this threatening context is undermining individual confidence in the possibility of a meaningful personal future. Further studies are needed of the psychological impact of the nuclear arms race upon various groups both in societies which possess nuclear weapons as well as in those that do not.

Living with the possibility of imminent annihilation in a massive nuclear exchange creates an unprecedented threat to individual human beings. Not only does one have to deal with the possibility of one's own agony or sudden death, but one must also confront the potential destruction of all that one loves—humanity itself—forever.

We have identified several psychological mechanisms which can have short adaptive value for the individual in protecting himself from such disturbing emotions as terror and guilt. At the same time these defense mechanisms increase the likelihood that nuclear war will actually occur because they impair the realistic perspectives of those who possess nuclear arms. This prevents the development and use of measures that could take control of the arms race.

1. *Avoidance.* The problem is regarded as too big to handle, too overwhelming, too technical. We leave it to others, to the leaders and the experts, to solve. We become numbed and turn away.

2. *Drawing upon old ways of thinking.* In the face of the terror evoked by an adversary we seek security, as humanity has traditionally done, through developing ever more dangerous weapons in increasing numbers, and from spurious notions of strength dominated by false concepts of winning and losing. Such thought patterns have become outmoded by the realities of nuclear weapons.

3. *Fear and impulsivity.* The climate of terror created by the superpower confrontation engenders a vicious cycle of fear and mistrust. Fear destroys the capacity for rational thinking and adaptive discrimination and promotes panic-driven, impulsive actions. Such actions provoke fear and similar panic responses in adversaries that further escalate the danger of conflict.

4. *Perceptual distortion.* As a response to threat, regression to archaic thinking patterns occurs, dividing the world into percepts of total goodness and total evil. An adversary comes to be perceived as an enemy that is completely evil, a process which impedes the discovery of areas of common purpose and reduces the ability to deal realistically with actual threat or danger from this or other sources.

5. *Dehumanization.* In order to further justify our hostility toward the adversary we deny to its leaders and people any human value or worthy motives. The distorted perception of human beings as inanimate objects tends to remove inhibitions against destroying them. The impersonality of graphs and pins on targets, or charts of megatonnage and throw weights (in fact the whole obscene jargon of the nuclear weapons race), destroys not only the appreciation of the humanity of an adversary, but one's own humanity as well.

Concluding Remarks

War is not an inevitable consequence of human nature. War is a result of interacting social, economic and political factors; it has been a social institution widely used over time to manage conflicts.

To argue that wars have always existed and that this social phenomenon cannot be eliminated ignores history, which has demonstrated a human capacity to change institutions and practices that are no longer useful or are socially destructive. Slavery, cannibalism, dueling, and human sacrifice are among the practices which the human race has recognized to be improper and has abandoned.

The genocidal nature of nuclear weapons has rendered nuclear war obsolete as a viable means for resolving conflict. Because inter-group tensions and conflicts are innate and thus inevitable, effective means for conducting and resolving conflict are indispensable. Human beings have developed and widely used such methods as avoidance/withdrawal, assertive non-violent behavior, unilateral initiative inviting reciprocation, competitive coexistence, negotiation, arbitration, and cooperation.

Rationality and foresight are unique human characteristics which have enabled individuals and groups to override primitive responses, to anticipate future consequences of behavior and to choose courses of action which offer maximal ultimate benefit.

Wars begin in the mind, but the mind is also capable of preventing war.

What Physicians Can Do To Prevent Nuclear War

Review available information on the medical implications of nuclear weapons, nuclear war and related subjects.

Provide information by lectures, publications and other means to the medical and related professions and to the public on the subject of nuclear war.

Bring to the attention of all concerned with public policy the medical implications of nuclear weapons.

Encourage studies of the psychological obstacles created by the unprecedented destructive power of nuclear weapons and the ways in which these obstacles prevent realistic appraisal of the dangers of nuclear weapons.

Develop a resource center for education on the dangers of nuclear weapons and nuclear war.

Initiate discussion to develop an international law banning the use of nuclear weapons similar to the laws which outlaw the use of chemical and biological weapons.

Seek the cooperation of the medical and related professions in all countries for these aims.

Encourage the formation in all countries of groups of physicians and committees within established medical societies to pursue the aims of education and information on the medical effects of nuclear weapons.

Establish an international organization to coordinate the activities of the various national medical groups working for the prevention of nuclear war.

An Appeal To the Heads of All Governments and To the United Nations

Advances in technology in the 20th century have benefitted humankind but have also created deadly instruments of mass destruction. The enormous accumulation of these nuclear weapons has made the world less secure. A nuclear conflict would ravage life on earth.

We speak as physicians in the interests of the people whose health we have vowed to protect. The scientific data concerning the medical consequences of the use of such instruments of mass destruction convince us that effective medical care of casualties would be impossible. We therefore urge that elimination of this threat be given the highest priority. No objective is more vital than to preserve the conditions that make possible the continuation of civilized life on earth.

As physicians, we know that the eradication of smallpox, coordinated by the World Health Organization, required intense international communication, cooperation, and dedication. Nuclear war is a far greater threat to humanity. Continuing discussion among the nuclear powers and other countries will be needed to achieve an early cessation of the race to produce these instruments of mass destruction, to prevent their spread, and ultimately to eliminate them.

Respectfully yours,

Participants in the First Congress
of International Physicians for the
Prevention of Nuclear War

Airlie, Virginia
March 23, 1981

An Appeal to the President of the United States of America, Ronald Reagan, and To the Chairman of the Presidium of the U.S.S.R. Supreme Soviet, Leonid Brezhnev

We, physicians from eleven nations, guided by our concern for human life and health, are well aware of the great responsiblity you carry and of the enormous contribution you can make to the prevention of nuclear war.

As physicians and scientists, we have for the past several days reviewed the data on the nature and magnitude of the effects that the use of nuclear weapons would bring. We have considered independently prepared medical and scientific analyses from many sources. Our unanimous conclusions are

1. Nuclear war would be a catastrophe with medical consequences of enormous magnitude and duration for both involved and uninvolved nations.
2. The holocaust would in its very beginning kill tens to hundreds of millions of people. Most of the immediate survivors, suffering from wounds and burns, affected by nuclear radiation, deprived of effective medical care or even water and food, would face the prospect of a slow and excruciating death.
3. The consequences of nuclear war would continue to affect succeeding generations and their environment for an indefinite period of time.

Science and technology have placed the most deadly weapons of mass destruction in the hands of the two nations you lead. This huge accumulation imperils us all. The interests of the present and all future generations require that nuclear war be avoided.

The medical consequences persuade us that the use of nuclear weapons in any form or on any scale must be prevented. To achieve this, we offer you our sincere support.

As physicians, we remember that the eradication of smallpox required intense international communication, cooperation, and dedication. Nuclear war is a far greater threat to humankind. It will require even more intense collaboration among the nuclear powers to achieve an early cessation of the race to produce these instruments of mass destruction.

Respectfully yours,

Participants in the First Congress
of International Physicians for the
Prevention of Nuclear War

Airlie, Virginia
March 23, 1981

An Appeal To the Physicians of the World

Dear Colleagues:

We address this message to you who share our commitment to the preservation of health. Our professional responsibility has brought us together to consider the consequences of the use of nuclear weapons.

We have participated in full and open discussion of the available data concerning the medical effects of nuclear war and its effects on our planet. Our conclusion was inescapable—a nuclear exchange would have intolerable consequences.

Enormous numbers would perish in the first hours and days of a nuclear war. The wounded survivors, burned and affected by nuclear radiation, would face unbearably difficult conditions, without effective medical aid, water or food. The consequences of a nuclear war would also be disastrous to succeeding generations. A major nuclear exchange would inevitably bring extensive long-term consequences even to countries not directly involved.

No one should be indifferent to the nuclear threat. It hangs over hundreds of millions of people. As physicians who realize what is at stake, we must practice the ultimate in preventive medicine—avoidance of the greatest hazard the world will ever know. Your help is needed in this great endeavor. We urge you

1. to inform yourselves, your colleagues, and the general public about the medical effects of nuclear war;
2. to discuss the medical consequences of nuclear war at meetings of members of medical societies, special symposia, and conferences;
3. to prepare and publish in the medical press and specialized journals articles about medical consequences of the use of nuclear weapons;
4. to speak about medical consequences of nuclear war to medical students and to your community;
5. to use your influence and knowledge to help strengthen the movement of physicians for the prevention of nuclear war.

Respectfully yours,

Participants of the First Congress
of the International Physicians for the
Prevention of Nuclear War

Airlie, Virginia
March 23, 1981

Delegates To the First Congress of International Physicians for the Prevention of Nuclear War

Airlie, Virginia
March 20-25, 1981

Herbert L. Abrams, M.D. USA
Phillip H. Cook Professor of Radiology, Harvard Medical School

Chief, Department of Radiology, Brigham & Women's Hospital and Sidney Farber Cancer Institute

Regina Armbruster-Heyer, M.D.
West Germany
Coordinator of Physicians Against Nuclear Energy

Stanley M. Aronson, M.D. USA
Dean of Medicine, Brown University Program in Medicine

Professor Medical Science, Brown University

A. Clifford Barger, M.D. USA
Robert Henry Pfeiffer Professor of Physiology, Harvard Medical School

Donald Bates, M.D. Canada
Chairman, Department of Humanities & Social Studies in Medicine, McGill University

Thomas Cotton Professor of History of Medicine, McGill University

Robert W. Berliner, M.D. USA
Dean, Yale University School of Medicine

Professor of Physiology and Medicine, Yale University School of Medicine

Sune Bergstrom, M.D. Sweden
Professor of Biochemistry, Karolinska Institute

Viola Bernard, M.D. USA
Clinical Professor Emeritus of Psychiatry, Columbia University College of Physicians & Surgeons .

Former Vice-President, American Psychiatric Association

John W. Boag, D.Sc. United Kingdom
Emeritus Professor of Physics as Applied to Medicine, Institute of Cancer Research, University of London

Past President, British Institute of Radiology

Past President, International Association Radiation Research

Nilolai P. Bochkov, M.D. USSR
Member of the USSR Academy of Medical Sciences

Chief Learned Secretary, Presidium of the USSR Academy of Medical Sciences

Director, Institute of Medical Genetics of the USSR Academy of Medical Sciences

President, National Scientific Society of Medical Genetics

John Burke, M.D. USA
Helen Andrus Benedict Professor of Surgery, Harvard Medical School

Chief Trauma Services, Massachusetts General Hospital

Former Chief, Shriners Burn Institute

Helen M. Caldicott, M.B.A.S., FRACP
USA
Formerly Instructor in Pediatrics, Harvard Medical School

Associate in Medicine in Cystic Fibrosis, Children's Hospital Medical Center

President, Physicians for Social Responsibility

Thomas C. Chalmers, M.D. USA
President and Dean, Mount Sinai School of Medicine of the City University of New York

Evgueni I. Chazov, M.D. USSR
Member of the USSR Academy of Sciences

Member of the Presidium, USSR Academy of Medical Sciences

Director General, National Cardiological Research Center, USSR Academy of Medical Sciences

President, National Cardiological Society

Eric Chivian, M.D. USA
Staff Psychiatrist, Massachusetts Institute of Technology

John Constable, M.D. USA
Associate Clinical Professor of Surgery, Harvard Medical School

Paul Duchastel, M.D. Canada
President, Association of French Speaking Physicians of Canada

Jack Fielding, M.D. United Kingdom
St. Mary's Hospital, Department of Hematology

Vice Chairman, Medical Campaign Against Nuclear Weapons

Stuart C. Finch, M.D. USA
Professor of Medicine, Rutgers Medical School

Chief, Department of Medicine, Cooper Medical Center

Former Director of Research, Radiation Effects Research Foundation, Hiroshima

Jonathan Fine, M.D. USA
Medical Director, North End Community Health Center

Alfred P. Fishman, M.D. USA
William Maul Measey Professor of Medicine

Director, Cardiovascular-Pulmonary Division, Department of Medicine, Hospital of the University of Pennsylvania

Jerome D. Frank, M.D. USA
Professor Emeritus of Psychiatry, Johns Hopkins University School of Medicine

Donald S. Gann, M.D. USA
Professor & Chairman, Section of Surgery, Brown University

Surgeon-in-Chief, Department of Surgery, Rhode Island Hospital

Chairman, Committee on Emergency Medical Services, National Research Council

H. Jack Geiger, M.D. USA
Arthur C. Logan Professor of Community Medicine

Director, Program in Health, Medicine & Society, City College - City University of New York

Alfred Gellhorn, M.D. USA
Visiting Professor of Health Policy & Management, Harvard School of Public Health

Former Dean, University of Pennsylvania Medical School

Former Dean, School of Biomedical Education, City College, New York

David S. Greer, M.D. USA
Professor & Chairman, Section of Community Health, Brown University

Associate Dean of Medicine, Brown University Program in Medicine

Agenlina K. Guskova, M.D. USSR
Professor, Doctor of Medical Sciences

Head of Department, Institute of Biophysics of the USSR Ministry of Health

Andrew Haines, M.D. United Kingdom
Epidemiology & Medical Care Unit, Medical Research Council

Arthur H. Hoyte, M.D. USA
Assistant Chancellor for Community Affairs, Georgetown University Medical Center

Assistant Professor in Community & Family Medicine and Obstetrics & Gynecology, Georgetown University School of Medicine

Dieter Koch-Weser, M.D. USA
Associate Dean of International Programs, Harvard Medical School

Howard Kornfeld, M.D. USA
Board of Directors, Physicians for Social Responsibility

Einar Kringlen, M.D. Norway
Director, Institute of Behavioral Sciences in Medicine, University of Oslo

Chairman Norwegian Information Committee on Defense & National Security

Mikhail I. Kuzin, M.D. USSR
Member of the USSR Academy of Medical Sciences

Vice-President, National Surgical Society

Member of the Scientific Committee, International Surgical Society

Director, Vishnevsky Institute of Surgery of the USSR Academy of Medical Sciences

Michitu Ichimaru, M.D. Japan
Professor, Department of Internal Medicine, Atomic Disease Institute, School of Medicine, Nagasaki University

Mikhail A. Ilyin, M.D. USSR
Member of the USSR Academy of Medical Sciences

Chairman, National Commission for Radiological Protection

Director, Institute of Biophysics of the USSR Ministry of Health

Carl J. Johnson, M.D., M.P.H. USA
Associate Clinical Professor of Social & Environmental Health, University of Colorado Medical School

Director of Health, Jefferson County Health Department

John Karefa-Smart, M.D. Sierra Leone
Chairman-elect, International Health Section, American Public Health Association

Supervisor, Medical Programs, Howard University Medical School

Former Assistant Director General, World Health Organization

Alexander Leaf, M.D. USA
Jackson Professor of Clinical Medicine

Chairman & Ridley Watts Professor, Department of Preventative Medicine & Clinical Epidemiology, Harvard Medical School

Chief of Medical Services, Massachusetts General Hospital

Etienne LeBel, M.D. Canada
Professor and Chairman, Department of Nuclear Medicine and Radiobiology, Sherbrooke Medical School

Robert Jay Lifton, M.D. USA
Foundations' Fund Research Professor of Psychiatry, Yale University

Patricia Lindop, M.D., D.Sc., FRCP
United Kingdom
Professor of Radiobiology, Department of Radiobiology, Medical College of St. Bartholomew's Hospital

Irving Myer London, M.D., Sc.D. USA
Former Chief of Medicine, Albert Einstein College of Medicine

Director, Whitaker College of Health Sciences & Technology & Management, Massachusetts Institute of Technology

Professor of Medicine, Harvard Medical School & Massachusetts Institute of Technology

Bernard Lown, M.D. USA
Professor of Cardiology, Harvard School of Public Health

John Mack, M.D. USA
Professor of Psychiatry, Harvard Medical School at the Cambridge Hospital

Chairman, Department of Psychiatry, Cambridge Hospital

Pulitzer Prize Winner

H. Marcovich, M.D., Ph.D. France
Professor, Pasteur Institute, Director of Research, National Center for Scientific Research

Jules H. Masserman, M.D. USA
Honorary Life President, World Association for Social Psychiatry

Professor Emeritus, Former Chairman of Psychiatry & Neurology, Northwestern Medical School, Chicago

Past-President, American Psychiatric Association

Roy Menninger, M.D. USA
President, The Menninger Foundation

Henri Mollret, M.D. France
Department of Epidemiology, Pasteur Institute

Martin C. Moore-Ede, M.D., Ph.D. USA
Assistant Professor of Physiology, Harvard Medical School

James E. Muller, M.D. USA
Assistant Professor of Medicine, Harvard Medical School

Associate in Medicine, Brigham and Women's Hospital

Paul F. Muller, M.D. USA
Assistant Dean, Indiana University Medical Center

Medical Director, St. Vincent's Hospital

Henry Neufeld, M.D. Israel
Professor of Cardiology, Tel Aviv University

Takeshi Ohkita, M.D. Japan
Professor & Director, Research Institute of Nuclear Medicine & Biology, Hiroshima University

David L. Pearle, M.D. USA
Associate Professor of Medicine and Pharmacology, Division of Cardiology, Georgetown University School of Medicine

Victor N. Petrov, Ph.D. USSR
Doctor of Physics and Mathematical Sciences

Department Head, Institute of Applied Geophysics

Valentin I. Pokrovski, M.D. USSR
Correspondihg Member of the Academy of Medical Sciences

Director, Institute of Epidemiology of the USSR Ministry of Health

Vice-President, National Scientific Society of Epidemiologists

Kenneth Rogers, M.D. USA
Professor & Chairman, Department of Community Medicine, University of Pittsburgh School of Medicine

Rita R. Rogers, M.D. USA
Clinical Professor of Psychiatry, UCLA School of Medicine

Chief, Division of Child Psychiatry, Harbor-UCLA Medical Center

Chairman, Task Force on Psycho-Social Impact of Nuclear Advances

Jonas E. Salk, M.D. USA
Founding Director, Salk Institute for Biological Sciences

Resident Fellow, Salk Institute for the Biological Sciences

E. Martin Schotz, M.D. USA
International Committee, Physicians for Social Responsibility

Mikhail G. Shandala, M.D. USSR
Corresponding Member of the USSR Academy of Sciences

Director General, Kiev Research Institute of General and Communal Hygiene of the Ukrainian Ministry of Health

Vice-President, Ukrainian Scientific Society of Hygienists

Evgueni V. Shmidt, M.D. USSR
Member of the USSR Academy of Medical Sciences

Director, Institute of Neurology of the USSR Academy of Medical Sciences

Honorary President, National Scientific Society of Neuropathologists and Psychiatrists

Vice-President, World Federation of Neurologists

Honorary Member, American Neurological Association

Professor Naomi Shohno, Ph.D. Japan
Professor, Hiroshima Jogakuin College

Chairman, Hiroshima Society for the Study of Nuclear Problems

Frank Sommers, M.D., FRCP Canada
Department of Psychiatry, University of Toronto

President, Physicians for Social Responsibility

Vladimir B. Tulinov USSR
Senior Researcher, Institute of US and Canadian Studies of the USSR Academy of Sciences

James Titchener, M.D. USA
Professor of Psychiatry, University of Cincinnati College of Medicine

Nikolai N. Trapeznikov, M.D. USSR
Member of the USSR Academy of Medical Sciences

Deputy Director General, National Oncological Scientific Center of the USSR Academy of Medical Sciences

Vice-President, National Cancer Society

Vice-President, Union International Contra Cancrum

William Verheggen, M.D. The Netherlands
The Netherlands Medical Association for the Prevention of War

Marat E. Vartanyan, M.D. USSR
Corresponding Member of USSR Academy of Sciences

Deputy Director, Institute of Psychiatry of the USSR Academy of Medical Sciences

Vice-President, National Society of Medical Genetics

Everhard Weber, M.D. West Germany
Coordinator of Physicians Against Nuclear Energy

Claude E. Welch, M.D. USA
Clinical Professor of Surgery Emeritus, Harvard Medical School

Senior Surgeon, Massachusetts General Hospital

Emil Wennen, M.D. The Netherlands
Secretary, The Netherlands Medical Association for the Prevention of War

Evgueni A. Zherbin, M.D. USSR
Professor

Director, Leningrad Central Research Institute of Roentgenology and Radiology of the USSR Ministry of Health

Vice-Chairman of the Board, National Scientific Society of Roentgenologists and Radiologists

International Physicians for the Prevention of Nuclear War, Inc.

635 Huntington Avenue, 2nd floor
Boston, Massachusetts 02115
Telephone (617) 738-9404